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MILBANK MEMORIAL FUND
QUARTERLY BULLETIN
NEW YORK HEALTH DEMONSTRATIONS
VOL. IV OCTOBER 1926 No. 3

The NEW YORK HEALTH DEMONSTRATIONS
in SYRACUSE *and in* CATTARAUGUS COUNTY

by SIR ARTHUR NEWSHOLME, M.D., K.C.B.

*Former Chief Medical Officer of the Local Govern-
ment Board of England and Wales*



THE following remarks on the public health demonstrations in Syracuse and in the County of Cattaraugus in New York State are based on data collected during (a) a two days' conference on health education to which the workers in these demonstrations made valuable contributions; and during (b) a week subsequently spent in visiting the two centres of work, in seeing some of their chief activities, and especially in conferring with the heads of sub-departments of work.

Although the visits and conferences were necessarily hurried, some compensation for this was derived from the readiness with which information was furnished by the workers, and by the fact that many years' experience in assessing public health work has given me some measure of skill in appreciating rapidly the salient points in administrative problems. Nevertheless, in view of the limited time at my disposal

it must be clearly premised that my statements and conclusions necessarily are only tentative in character; that some errors in detail may emerge in my comments; that some recommendations may possibly be made which have already been adopted.

GENERAL OBSERVATIONS

LET me in the first instance make some general observations on the character and intent of these two demonstrations.

Although not primarily a form of research each demonstration partakes of this character; it is likely that a large share of the utility of the demonstrations will be found to consist in

their furnishing an answer to the problem how to apply the highest sum of human knowledge on health in the various branches of public health administration defined in its widest terms.

The intent of the demonstrations is at least four-fold, viz.:

1. To raise the local standard of public health administration to the highest degree of efficiency practicable:

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IN the July issue of the *Quarterly Bulletin* an account was given of the tour of inspection which Sir Arthur Newsholme had made of the rural and urban projects of the New York Health Demonstrations. Dr. Newsholme's summary was given before the members of the Advisory Council of the Milbank Memorial Fund at a dinner tendered in his honor.

¶ In this issue is presented a more detailed review of the health work in progress in the two communities and a resume of the character and intent of the demonstrations program, as prepared by Sir Arthur after his return to England in June.

2. By local experimentation in different aspects of administrative work to "test out" the methods which will secure the maximum effect for a given expenditure of money, time and human effort:

SEVERAL distinctive features of the demonstrations and further methods by which the programs and activities now under way can be made more effective are enumerated by Sir Arthur in his review. In particular, he cites the desirability of increased attention to the physical welfare of mothers and of children. He also stresses again the need for adequate facilities for the treatment of existing disease as a means of its prevention.

¶ Other pages of the *Quarterly Bulletin* are devoted to measures being taken to prevent accidents in the rural, urban and metropolitan centers, and to studies of the causes of accidents in these localities.

3. To demonstrate to the local authorities concerned and to the general public represented by them, the benefits which accrue from efficient and complete sanitary work; and incidentally

4. Thus to stimulate more rapid development of similar work in other cities and counties and even more widely than this.

The last named object from a community standpoint is the most important of all; but spade-work will be needed over a series of years to enable the demonstrations to develop their full potentialities of widespread influence.

Nevertheless, in actual experience the influence of good work begins immediately to tell beyond the locality in which it is done. The whole world has become a sounding board: and the whisper of successful work in any branch of administration in Syracuse or Cattaraugus County will be heard as soon as the demonstration in this particular has succeeded. Happily in this respect mankind is becoming increasingly imitative; health and administration directed to secure it are even more "catching" than is disease; and it is stimulating to visualize

the ultimately great influence on the welfare of mankind which these two demonstrations, when brought to a successful issue, can exert.

The duration of the demonstration must necessarily be limited, and its success will, I think, be measurable by the increasing extent to which responsibility for the improved organization is gradually accepted by the local authorities concerned.

A further observation appears to be desirable. The demonstration does not consist in an effort of the Milbank trustees to "sell" their activities to the local authorities. The latter are willing partners, and indeed predominant partners, in the joint effort; the chief responsibility for its success rests with them; and with the continued appreciation of the moral responsibility thus undertaken, of which I saw ample evidence, as well as of the privilege of taking part in the combined effort, I have no doubt that success will be secured.

I should give here a word of warning against expecting a completely successful issue in the next four or five years. During that time great strides will be made; but it does not appear reasonably to be possible in less than ten years that this important experiment will have had time to prove its immense possibilities of good in actual local accomplishment and as an example for other communities.

From what has been already written it will be evident that the work of these demonstrations is concerned with

1. The actual accomplishment of the best practicable public health work;
2. The proof to others that such work has been done: which will involve—
3. A comparative statement between current and past experience in each branch of this work.

I am not concerned in this report with statistical means

for securing (2) and (3), as this is in the competent hands of Edgar Sydenstricker. Much not discussed in this memorandum will need to be set out under these two headings.



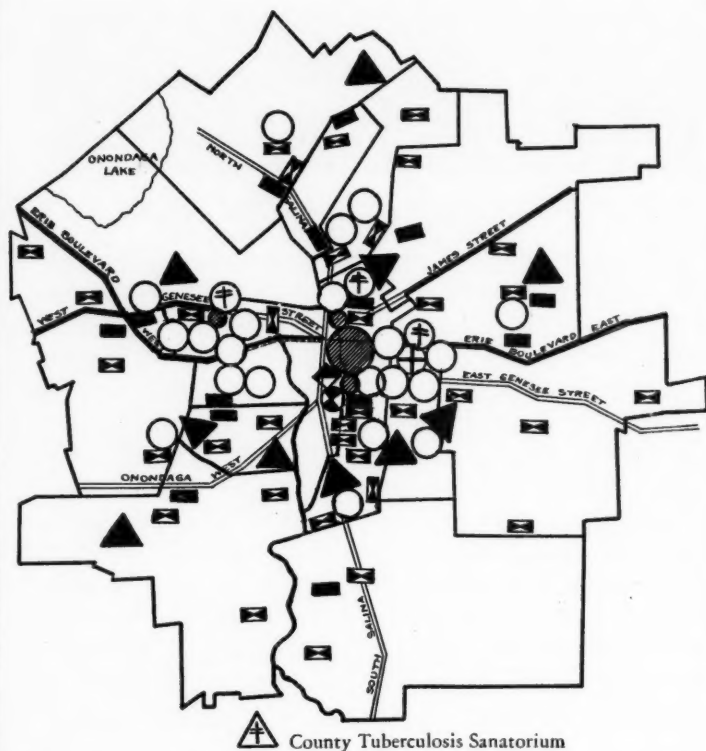
DISTINCTIVE FEATURES *of the* DEMONSTRATIONS

THE demonstrations now in process differ from any previous voluntary effort known to me in the comprehensiveness of their programme and in their intimate affiliation to existing local official and voluntary effort having the same aim. Each demonstration operates in a setting of official agencies, and is so organized as to strengthen and not in the slightest measure to supersede the official bodies. With these must continue to rest the responsibility for the health of the population, so far as it can be influenced by efforts outside the family circle. This is not to say that the help of voluntary agencies is regarded as negligible. In many areas in America it continues to be a very important, or even occasionally, the predominant partner in public health effort; and in some areas, unhappily, it is often not closely linked up with official work. In such areas, the substitutional carrying out of official work carries with it implicit drawbacks in accordance with the physiological law that organs intended to function regularly when unexercised are liable to atrophy. There is the further disadvantage that voluntary efforts draw heavily on the pockets of the few who are charitably inclined, while official work is paid for on a presumably equitable basis by the entire community. The true role of voluntary

SYRACUSE · NEW YORK

ORGANIZED HEALTH AGENCIES

1926



Headquarters Syracuse Department of Health, City Hall

- | | |
|---------------------------------------|------------------------------------|
| ● Branch Offices
Health Department | ◆ Co-operative
Welfare Agencies |
| ▲ Hospitals | ⊗ Visiting Nurse Association |
| ○ Clinics | ⊕ Syracuse Free Dispensary |
| ⊞ Public Schools | ■ Parochial Schools |

workers is to begin and to continue pioneer public health work, until it can be satisfactorily undertaken by and for the entire community; to insist persistently that the transferred work shall be efficiently and economically executed; and to begin to experiment in the wider ranges of preventive work always opening out with each step in advance which has been satisfactorily taken. There can be no valid contrast between "official" and "voluntary" committees. In large measure they are one and the same. The members of both are unpaid representatives of tax payers or of charitable donors; and neither of them can dispense with the services of paid officials to carry out their work.

Immediate Outlook

It is satisfactory that in both demonstration areas the true relation between official and voluntary work appears to be realized. The object of the demonstrations is to secure a more rapid enhancement of public health than would otherwise be possible, and to do this largely within the range of official work. In thus adding to the physical health of the community and thereby its sum of happiness, the Milbank trustees are aiding in a work of supreme importance; and the method adopted by them, of assisting financially to secure for each of the demonstration areas an adequate staff of medical and hygienic experts who would otherwise not be immediately obtainable, and institutional assistance corresponding to this staff, has exceptional power for securing rapid public health improvement and the benefits derivable therefrom.

Practical Method of Advance

In bringing about this end, evidently regard must be had to practical considerations in each area. Theoretically two methods of advances may be considered: (a) to introduce at

once the greatest number of staff and agencies which can possibly be utilized; or (b) to increase staff and agencies more gradually in the light of advancing experience.

Possibly the first of these plans would give the most dramatic statistical evidence of improvement; but the second embodies the greatest likelihood of a permanent uplift. Direct measurement of results, whichever plan be adopted, will be difficult, but I entertain no doubt that ample evidence of progress will be forthcoming both by general judgment and by statistical measurement.

The second is the plan in actual operation; and it presents the supreme advantage that whenever the Milbank contributions are withdrawn, local official and voluntary agencies may reasonably be expected to continue the work initiated and extended during the demonstrations, on the expanded scale already reached, due account being taken that some present expenditures are temporary in the nature of the case. That this will be so is already shown by the increasing allotment of local funds to public health work which is accompanying the advancing work of the demonstrations both in Syracuse and Cattaraugus.

A Complete Programme

I have referred to the comprehensiveness of the programme of the demonstrations. This is, I think, its unique characteristic. Most voluntary efforts concern themselves with some special branch of health work (as for instance the prevention of tuberculosis, or of venereal diseases; or the promotion of maternal or child welfare) and valuable results have followed their efforts and especially their success in stimulating local governing bodies to carry on similar work. The present schemes deal with the promotion of health by all known means, and embrace the entire ambit of public health admin-

istration. This in my view is the sound method of approach. No man liveth to himself; no community is a separate entity; and similarly no branch of public health work can be satisfactorily executed without aid from collateral branches of public health work. It has been said that the whole of clinical medicine can be taught in the study of tuberculosis and syphilis: and the wider approach to the prevention of these two major enemies of health and longevity implies the main problems of public health. The prevention of tuberculosis, for instance, is concerned with the problems of adequate housing, of pure food and of food duly regulated as to quality and variety, of good ventilation and sunlight, of freedom from dust, of the early and continued treatment of disease, of hygienic habits of life. The prevention of syphilis and of gonorrhea, its partner in the decimation of humanity, perhaps is more strictly a special problem, though it has wide public health bearings. But in respect of both these diseases character and conduct are essentially implicated; on the part of those—often failing in their duty—who are responsible for sanitary regulations, for the provision of satisfactory treatment for all needing it, and for the enforcement of legal

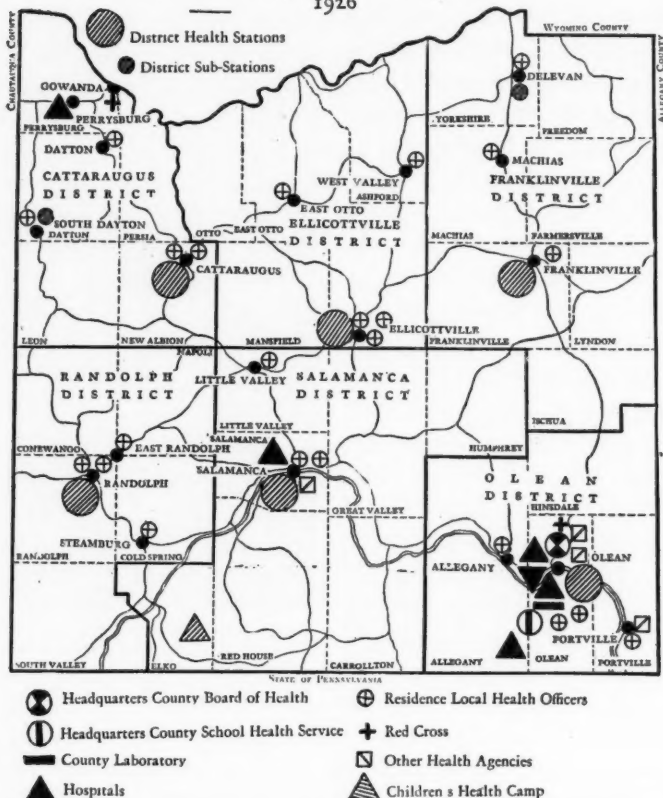


Traveling on official duties consumed over one-fifth of the time of the public health nurses in Cattaraugus County last year.

CATTARAUGUS COUNTY NEW YORK

ORGANIZED HEALTH AGENCIES

1926



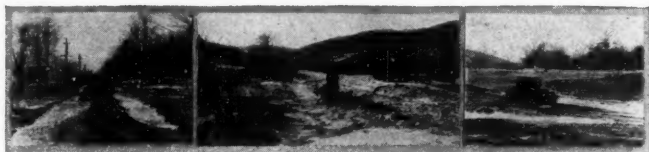
CATTARAUGUS COUNTY BOARD OF HEALTH

MILBANK MEMORIAL FUND

Cattaraugus County, located in the southwestern part of New York State, covering an area of some 1,300 square miles, and having a population of approximately 74,000 persons, is the scene of the rural health demonstration. Two similar demonstrations, both in New York State, are under way—one in the City of Syracuse, and the other in the Bellevue-Yorkville district of the City of New York.

restrictions; and on the part of patients themselves conscientiously and always to follow a line of conduct which will ensure the safety of others.

Conversely not only in respect to these diseases but also in the promotion of health generally elementary sanitation is needed; and in the promotion of maternal and child hygiene, of the hygiene of domestic and school life and of industrial life there will be found a fruitful means for preventing many of the diseases which cause premature breakdown in middle age, and especially in the fifties and sixties from cardiac and other degenerative diseases. The two lines of approach,—by the practice of elementary sanitation in all its branches, including the general application of the laws of physiology and hygiene, and by the practice of specific measures directed to the prevention, including the prevention by the treatment of specific diseases,—are not only not inconsistent; they must be indissolubly associated if success is to follow public health effort.



SPECIAL LINES of ADVANCE

ALTHOUGH I have expressed an opinion in favor of a general advance in every branch of public health administration, this is not inconsistent with the probability that in certain branches of work more rapid progress will be secured than in others. This is likely to be the case for instance for tuberculosis work; and in view of the ramifications of anti-tuberculosis efforts, this is not to be deprecated.

Again, valuable work has been done by medical officers of

New York State in securing the immunization against diphtheria of large numbers of children, and the work of State officials in securing freedom from the risks associated with tuberculous milk is beyond praise. But to ensure that there is a steady succession of children immunized against diphtheria as well as to protect children from the major (human) sources of tuberculous infection continuous effort is needed; effort which will bring about an altered attitude to health problems, not simply passive adoption of a specific measure of prevention; and to secure this end the public health nurses now employed under the generalized system will, I think, form a chief means of uninterrupted progress. These nurses come into touch with the mother soon after her infant's birth or even earlier, at a time when the mother's heart and mind are especially open to counsel and advice; and in regard to infant and child hygiene, in securing attention to the pre-school child, in persuading parents to have school children treated for adenoids and dental caries, etc., as well as in promoting immunization against diphtheria, in securing precautions which will prevent the infection of young children by an adult tuberculous patient, and in other directions, public health nurses can become the guides and guardians of family life. This will be ensured when an adequate number of public health nurses fully realize the importance of their mission and make good their position as welcomed visitors and advisers.

Although concentration and specialization of work, unless carefully devised and controlled, is likely to produce lopsided and relatively evanescent results, certain branches of work may, I think, advantageously be pushed forward somewhat rapidly and be made to assist in the development of wider public health work. One of these is the tuberculosis work; and as this is already being done, and I may add with



The program of maternity, infancy and child hygiene in Syracuse includes home visiting by the nurses of the Department of Health. During 1925 a total of 26,016 visits were made to the homes of infants and children of pre-school age.

promise of almost complete success in Cattaraugus County, I need not further dwell on it.

There are several other special branches of work to which particular attention appears to me to be needed. Among these is work on the physiological plane. The ultimate object of public health work is to step outside the range of disease and by physiological measures to anticipate and prevent illness. This should especially be so in regard to motherhood and childhood.

Motherhood and Childhood

But nowhere, so far as I know, and judging by the official figures, not in the two demonstration areas, is this ideal approached. There is a large body of avoidable illness and mortality which will be greatly diminished and eventually prevented when local health authorities, voluntary agencies,

and especially physicians in private medical practice join forces and bring to bear the educational and still more the active preventive and curative measures which they can provide. This general statement, if necessary, could be substantiated by the lamentably high rates of mortality of mothers in pregnancy and child-bearing, and by the excessive number of still-births and of deaths of infants under a month old. Behind these deaths, and due to similar neglect of practicable measures, there looms a much larger mass of suffering, of chronic invalidism, of feeble physical health and mentality, which fails to be recorded in our official returns.

I recognize that much is being done to diminish these evils in both areas; but I suggest that the advice and assistance now given, only apply to a minority of those needing them; and that the demonstrations can only experience a full measure of success:—

1. When every prospective mother has offered to her medical advice and examination either by her own doctor, or on his instigation at a pre-natal centre.

Action is needed to persuade physicians to take their part in this, and I am confident this can be done. It must be on such a scale as will enable the very poor, those in straitened circumstances, and the well-to-do all to participate.

2. When every mother is attended in parturition (a) with full diagnosis of her physical condition as a prospective mother, and (b) with absolutely satisfactory medical aid and nursing, determined by such previous knowledge.

This will mean action for securing more general skilled attention in pregnancy, for consultant services in difficult parturition, and for further provision of hospital beds for parturition, without any directly inhibitory conditions as to payment, imposed in the emergency. This does not necessarily imply gratuitous treatment; but it does involve a careful graduation of payment to means, or possibly the making of provision on a co-operative basis.

Valuable work is being done in the various health centres

and to some extent in home visitation. The work of home visitation is even more important than centre work. It needs development, the first visit being made promptly when the birth is registered and subsequently at intervals determined for each case by home conditions.

The Pre-School Child

The public health nurse who knows the mothers in her district and comes into touch with them in various relationships can rapidly build up a system which will ensure continuous supervision of children aged from one to six years, who now commonly pass out of sight; and who, when they first attend school are usually found to be suffering from dental caries, often from diseased tonsils and adenoids, or other morbid conditions. A large part of the difficult work of school medical inspection would cease to be necessary if, in

Toxin-antitoxin treatments for the prevention of diphtheria are offered pre-school children in Onondaga County at the clinics held for school children. Here is shown a group of mothers and their children at a clinic in the school at Tully, near Syracuse.



the favorable circumstances of these two areas, the possibilities of pre-school supervision were actively pushed.

In the prevention of the maladies of childhood and school life the importance of the prevention of rickets is only now beginning to be realized. At almost every visit by a public health nurse and at the centres the simple means for preventing rickets should be emphasized.

Rickets, Dental Disease, Tonsils and Adenoids

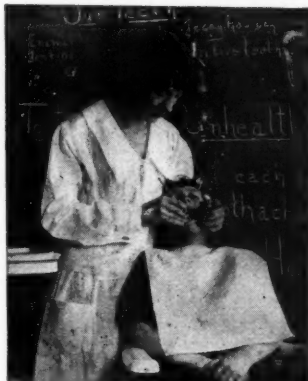
Although it does not figure largely in our death returns, rickets often determines a fatal result in cases of measles and whooping cough and in pneumonia. It has a large share in favoring the chronic catarrhs which lead to diseased tonsils and adenoids. Its share in the production of bony deformities is well-known, but its influence in leading to mental retardation is too little recognized. Nor is the remote significance of the bony deformities caused by rickets practically realized. The female infant suffering from rachitic contraction and deformity of the pelvis becomes the future mother; and a large share of the excessive mortality in child-bearing which now occurs is due to rachitic deformity of the pelvis the result of rickets during the mother's infancy. The fact that the prevention of rickets in infancy is a chief means of preventing the death of mothers in childbirth,—a highly significant fact—incidentally points to the inference that the benefit of public health work may sometimes not be measurable until twenty-five or thirty years after its successful accomplishment!

It is evident that a steady campaign is indicated directed towards inducing mothers to give their younger children an adequate amount of fresh milk and butter, and in addition to give each infant from birth onwards a regulated daily small amount of codliver oil, especially during the winter

months. The need for an approximation to out-door life and to graduated exposure to sunlight will also need to be emphasized.

Two further points, I think, should be stressed.

Dental disease is a very common cause of ill health both in mothers and their children. In some sanitary districts known to me, gratuitous treatment of dental caries is given to prospective and to nursing mothers as a means of securing normal pregnancy and a healthy child. It is also given to consumptive patients. The need for dental treatment of children in the pre-school period as well as of school children is well known. In the demonstration areas completely satisfactory results cannot be anticipated until such treatment is made universally available. Similar remarks apply to the treatment of tonsils and adenoids.



Treatment as a Means of Prevention

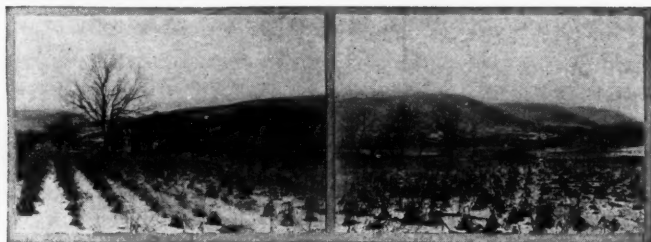
No public health administration is complete which disregards the need for treatment of existing disease, as a means of preventing the ulterior and more serious results of the disease in question. This statement is axiomatic; and its importance is being increasingly realized in public health work in every country.

The method for meeting this need is not for me to discuss here. The essential point is that we cannot be contented to recognize disease which is curable, without satisfying our-

selves that the necessary treatment is given. Merely acquainting parents with the conditions discovered does not clear our responsibility. In the ultimate issue, if parents cannot be persuaded to secure the necessary treatment, some other method of obtaining this end must be devised.

CONCLUDING REMARKS

As already noted, in each area the financial assistance of the Milbank Memorial Fund is regarded as supplementary to, and as not in the slightest degree supplanting, those of the local governing body or of existent local voluntary agencies. This fact constitutes a great claim for general support; and the ultimate issue of the demonstrations will depend on the maintenance of this triple bond of union of effort. The responsibility of the local council, as well as its authority, remains supreme. In accepting the demonstrations the City Council of Syracuse and the Supervisors of Cattaraugus County have taken most statesmanlike and far-reaching action for the benefit of their constituent populations. This action carries with it necessarily the moral obligation to appoint and support the most efficient obtainable whole-time workers, irrespective of fear or favor; and from what I have seen I entertain no doubt that the conditions needed for making the demonstrations an important success will be fulfilled.



NEWS DIGEST

of the NEW YORK HEALTH DEMONSTRATIONS

COMMUNITIES throughout the United States have of late years sought in various ways to prevent the increasing occurrence of accidents. Nevertheless the general accident rate and the rates for many specific kinds of accidents were shown to be higher in this country than in a number of foreign countries with which comparisons were drawn in a recent study made by the Committee on Public Accident Statistics of the National Safety Council.* Deaths from accidental falls, for example, reached a total of 12.8 per 100,000 population in the United States, while similar rates were 7 per 100,000 in England, 4 per 100,000 in Scotland and 6 per 100,000 in Australia. In only one instance, accidental drowning, is the United States fatality rate for a specific cause surpassed by that of

the other countries surveyed.

Unlike other countries for which comparative data are available, automobile fatalities lead the list of specific kinds of accidents in this country. The death rate charged to automobile accidents in the United States in 1923 was 14.8 per 100,000 population. In 1924, it was found that the rate was 15.7, and that over 17,000 deaths from automobile accidents had occurred in the United States during the year. Automobile fatalities, excluding collisions with street cars and railroad trains, increased to 19,800 in 1925, the death rate from this cause increasing to 17.2 per 100,000 population.

The fatality rate from automobile accidents, when computed on the basis of the number of motor vehicles registered, has been decreasing for several years, but the rate for 1925 was practically the same

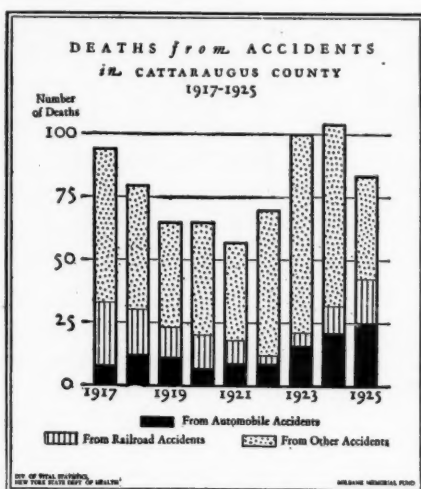
*Public Accidents—A National Problem, National Safety Council, Chicago, 1925.

as that for 1924. There were 19,954,347 automobiles registered in the United States in 1925, as against 17,591,981 registrations in 1924.

In New York State 1,891 per-

sons lost their lives and 54,398 other people were injured as the result of 47,128 automobile accidents in 1925. In the great majority of these accidents, the automobile was reported to be in apparently good condition, and the accident occurred on a straight level road under the most favorable driving conditions. Over 38,000 of the drivers of the vehicles had had two or more years' driving experience, but in almost 23,000 cases the operator was reported to be driving inattentively. In approximately 12,500 accidents involving pedestrians, the per-

sons injured were walking, running or playing in the street, and in over 5,000 instances they were crossing the street at some point other than an intersection.



Deaths from accidents among residents in Cattaraugus County, during the five-year-period, 1917-1925.

The motor vehicle law of New York State was revised in 1924, effective provision being made for the reporting of all motor vehicle accidents in which any person was killed or injured. Failure on the part of the person operating the vehicle to make such a report was made a misdemeanor. The statistics thus gathered will provide data for use in the prevention of accidents.

AS a warning to motorists, the Cattaraugus County Board of Health, with the co-operation of the State and

County highway departments, is erecting crosses, bearing the words "Fatal Auto Accident" at every point in the County at which there has been a fatal automobile accident in the past three years.

Commenting upon the accident death rate as compared with the general death rate of the County, Dr. Stephen A. Douglass, County Health Officer, recently said:

"Accidental deaths in Cattaraugus County in 1925 outnumbered deaths from cancer, apoplexy, kidney disease, pneumonia or tuberculosis. There were eighty-four such deaths during this period and 104 in 1924. Automobile accidents were directly responsible for twenty deaths in 1925. In addition, automobile collisions with trains killed eight persons.

"If no means can be developed to control this situation, with the increasing number of fatalities caused by automobiles, accidents soon will become the leading cause of death in Cattaraugus County."



BULLETIN boards erected in the main thoroughfares of Syracuse, and lectures given in the schools and in industrial

establishments are among the educational measures being undertaken in the City to aid in the prevention of accidents. These measures are centered under the department of public safety of the Syracuse Chamber of Commerce, which is co-operating with the local Department of Health and various other official and voluntary agencies engaged in health work in the community.

Data on which an educational program in safety devices, chiefly against fire, will be based, have been obtained by means of a "home inspection" questionnaire distributed among the school children of the City.

Crosses marking the location of every fatal automobile accident in Cattaraugus County are being erected by the County Board of Health.



A STUDY of the causes of accidents in the Bellevue-Yorkville district and of the age groups in which specific kinds of accidents were most prevalent was recently made by Godias J. Drolet, Consultant on Statistics for the metropolitan health demonstration. It is planned to use the information gained by this study as the basis for a campaign of safety education in the district.

The data, which were based on the mortality returns of the Bureau of Records of the New York City Department of Health, covered the two years 1923 and 1924. While the total mortality from all causes in the district averaged a little over 3,000 deaths annually, more than 250 each year were due to accidents. During 1923, a total of 282 persons were fatally injured in the district, of whom the majority, 271, were residents of the area. In 1924, fatal injuries were sus-

tained by 241 residents and by 12 non-residents of the demonstration territory.

Of the injuries resulting fatally, it was found that 28 per cent, or almost one in every three, were injuries sustained in "street accidents"—that is, while the person was walking, driving, running or playing in the streets. Falls were responsible for 24 per cent, or about one in every four fatal accidents.

The accident rate was found to be highest among persons between the ages of forty-five and sixty-four, 36 per cent being charged to this group. The next largest number of accidents (28 per cent) occurred among persons of from twenty-five to forty-four years of age. In this group the majority were either street or industrial accidents. Eleven per cent of the accidents occurring were among school children. Of these, 72 per cent were described as street accidents.



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